Mind wandering during attention performance: Effects of ADHD-inattention symptomatology, negative mood, ruminative response style and working memory capacity.

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Abstract

OBJECTIVE:
In adulthood, depressive mood is often comorbid with ADHD, but its role in ADHD-inattentiveness and especially relations with mind wandering remains to be elucidated. This study investigated the effects of laboratory-induced dysphoric mood on task-unrelated mind wandering and its consequences on cognitive task performance in college students with high (n = 46) or low (n = 44) ADHD-Inattention symptomatology and Hyperactivity/Impulsivity symptoms in the normal range.

METHODS:
These non-clinical high/low ADHD-Inattention symptom groups underwent negative or positive mood induction after which mind wandering frequency was measured in a sustained attention (SART), and a reading task. Effects of ruminative response style and working memory capacity on mind wandering frequency were also investigated.

RESULTS:
Significantly higher frequencies of self-reported mind wandering in daily life, in the SART and reading task were reported in the ADHD-Inattention symptom group, with detrimental effects on text comprehension in the reading task. Induced dysphoric mood did specifically enhance the frequency of mind wandering in the ADHD-Inattention symptom group only during the SART, and was related to their higher self-reported intrusive ruminative response styles. Working memory capacity did not differ between high/low attention groups and did not influence any of the reported effects.

CONCLUSIONS:
These combined results suggest that in a non-clinical sample with high ADHD-inattention symptoms, dysphoric mood and a ruminative response style seem to be more important determinants of dysfunctional mind wandering than a failure in working memory capacity/executive control, and perhaps need other ways of remediation, like cognitive behavioral therapy or mindfulness training.